



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8

999 18TH STREET - SUITE 500

DENVER, CO 80202-2466

<http://www.epa.gov/region08>

Ref: EPR-ER

POLREP #2

Vermiculite Intermountain Site

Salt Lake City, Utah

I. HEADING

Date: May 1, 2003
From: Floyd Nichols, On-Scene Coordinator
Agency: EPA/8
Unit: Region VIII - Emergency Response Program
999 18th Street, Suite 300
Denver Colorado 80202
(303) 312-6983
To: Kevin Mould, EPA Headquarters
POLREP No.: 2
Site: Vermiculite Intermountain Site
333 West 100 South (former)
Salt Lake City, Utah

II. BACKGROUND

Site Number: 08GA
Party Conducting the Action: EPA
Response Authority: CERCLA
CERCLIS No: UTN000802119
NPL Status: No
Action Memorandum Status: NA

III. SITE INFORMATION

A. Incident Category

Removal Evaluation

B. Site Description

1. Site description

Vermiculite Intermountain ('VI'), located on the west edge of downtown Salt Lake City, UT, is one of many facilities that received vermiculite ore from a mine near Libby, Montana. The Libby mine, at one time, produced about 80% of the world's supply of vermiculite ore. From Libby, some of the ore was shipped to various locations throughout the United States for further processing and distribution. Vermiculite ore from the Libby mine is co-mingled with amphibole asbestos of the tremolite-actinolite-richterite-winchite solution series ('tremolite asbestos'), and varying amounts of tremolite asbestos remain at many of the facilities which managed and/or processed ore from the Libby mine.



The VI facility received vermiculite ore in rail cars from 1940 until the early 1980s. In the mid 1980s, the facility was sold and the processing plant was relocated to another site several blocks away. At the VI facility, the ore was heated in a dry furnace until the imbedded layers of asbestos expanded ('exfoliated') (the process resembles that which happens to popcorn when it is heated). The exfoliated vermiculite (also known as "Zonolite") was then released to wholesale and retail markets for a variety of uses including home and building insulation and as a soil amendment. The original VI boundaries have changed over time - portions of the former site now consist of a Utah Power & Light (UPL) substation, a commercial parking lot, and small businesses.

The surrounding neighborhood is primarily commercial and recreational.

2. Removal Site Evaluation and Site Characteristics

The VI property and the surrounding area have undergone extensive urban redevelopment in the last 2-3 decades, and the original VI property boundaries are now indistinct. A former employee, however, stated that the majority of the VI exfoliation building was on the parcel now used by UPL (a PacifiCorp subsidiary) as an electrical substation. Some gravel fill has been placed in and around the substation hardware and across the adjacent parking/service areas. The substation is secured at all times by chain-link fencing and locked gates. Properties adjacent to the substation are currently used for a variety of municipal and/or commercial purposes.

During substation walkthrough inspections in 2002, what appeared to be vermiculite could be seen on the ground surface in several locations. EPA subsequently sampled portions of the substation property in October 2002. As geoprobe core samples were obtained, what appeared to be visible vermiculite/asbestos waste material (a.k.a., "stoner rock") could be seen in the cores. Analysis of surface and subsurface soils indicated percent-levels of tremolite asbestos in some surface locations and at some subsurface horizons.

Following EPA notification of the analytical findings, UPL, through a local asbestos firm in December 2002, removed loose vermiculite from the scarified ground surface using a high-efficiency vacuum in order to address immediate exposure concerns for their employees. Efficacy samples following that mitigation effort have not been collected.

Percent levels of tremolite asbestos remain in the subsurface at the UPL substation, and may also be present on the ground surface within and around the substation. Additional sampling will be necessary at and adjacent to the substation to determine the extent of contamination.

3. Description of threat

Asbestos is a hazardous substance as defined by the NCP (40 CFR Section 302.4). Tremolite asbestos is of concern because chronic inhalation of excessive concentrations of the fibers can possibly result in lung diseases such as asbestosis, mesothelioma, and cancer. Subacute exposures as short as a few days may cause mesothelioma.

3. State and Local Role

EPA has consulted with the Utah Department of Environmental Quality (UDEQ) concerning the sampling events and results. Neither UDEQ nor local agencies have the resources to conduct the needed site investigations or clean-ups independently.

B. Future Plans

EPA will conduct additional sampling in order to determine the extent of contamination. Following such determination, EPA will review the findings, options, and plans with appropriate UDEQ, UPL, and Salt Lake City representatives, and other interested parties.

C. Key Issues

None identified at this time.